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ABSTRACT

As more immigrants enter the United States, there are more lower-skilled people in the country, especially in the Los Angeles area, whereas the growth in jobs is in the higher-skilled sector of the job market. As the problems have increased, the need for business involvement in education has become apparent. During the past 10 years, business involvement in schools has steadily increased. Beginning with modest local initiatives like adopt-a-school programs, other types of partnerships have evolved. Such business partnerships enable schools to serve at-risk youth by providing increased access to employment and work experiences and increased personal attention. A current model project involves the Los Angeles Area Business/Education Partnership Project operated by Los Angeles Trade Technical College, California State University Los Angeles, the East San Gabriel Valley Regional Occupational Program, more than 300 businesses, and more than 20 public and nonprofit community service agencies. Key components of this program are as follows: early identification, parental involvement, an adaptive curriculum, a combination of instructional approaches, cooperative training programs, decentralized services, open-entry enrollment, cooperative liaisons with local businesses, academic instruction tied into student career goals, and liaison with community service agencies. The project has been effective in both employment placement effectiveness and school dropout prevention. (Contains 23 references.) (KC)

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HOW STUDENTS AND PROGRAMS BENEFIT FROM BUSINESS/EDUCATION PARTNERSHIPS

By Laurel Adler and John Cragin

BACKGROUND

Education and the Economy

According to U.S. Secretary of Labor Robert Reich in The Work of Nations (1992), the vast majority of America's students are being subjected to a standardized education designed for a no longer existing standardized economy. By this Reich explains that America's educational system at midcentury mirrored the national economy of high-volume production with an assembly line curriculum. By the last decade of this century, although the economy has changed dramatically, the form and function of the American education system has remained roughly the same (Reich, 1992). This system, while continuing to serve the needs of the university bound student in a somewhat acceptable manner, has virtually ignored the more than 50% of students who do not pursue a traditional four year college education, even though these students face the most daunting obstacles in attempting to find well paying jobs (Los Angeles Times, December 29, 1992). According to The Forgotten Half (William T. Grant Foundation, 1988), "as these young people navigate the passage from youth to adulthood, far too many flounder and their lives as adults start in the economic limbo of unemployment, part-time jobs and poverty wages. Many of them never break free. "Blacks, Hispanics and other minority groups have been especially hindered and frequently have few options to get the additional schooling or training they need to land skilled and better-paying jobs (Los Angeles Times, December 29, 1992). According to the National Center on Education and the Economy (1992), a New York-based research group, the level of progress of America's minorities will significantly shape America's

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future standard of living. If their potential is not tapped, the report warns, either the rich get richer and the poor get poorer, or "we all slide into relative poverty together."

Lester Thurow asserts in Head to Head the Coming Economic Battle Among Japan, Europe, and America (1992), that the skills of the labor force are going to be the key competitive weapon in the twenty-first century. Arvil Van Adams (1991), chief economist for the World Bank, echoes this assertion contending that the ability of the region and the nation to respond to global competition will determine national and local futures. Van Adams asserts that a country's ability to compete rests to a major degree with the skills of workers and management in their use of capital and technology.

The U.S. International Trade Commission (1992), has concluded that while U.S. skilled workers as a whole stand to benefit from The North American Free Trade Agreement (NAFTA), unskilled workers or workers with minimal skills training will suffer a steady decline in jobs and income. The New York Times (December 27, 1992), reports that enormous strides in efficiency and growing automation are allowing manufacturers to produce more goods with the same or fewer hands and as a result, is causing a shrinkage in total employment in manufacturing. Hit hardest by this increase in individual productivity is the worker with limited skills training. These employees, who are often the first to lose jobs, are usually hard pressed to find other employment at wages comparable to what they were making unless they receive training commensurate with the needs of today's economy. Yet, in America's Choice: High Skills or Low Wages (1988), The National Center of Education and the Economy states that Americans are unwittingly making a choice that undermines the American dream of opportunity for all, a choice between high skills and low wages. Gradually, silently, according to the National Center

of Education and the Economy, we are choosing low wages at the expense of providing those students who will not graduate from college the kind of education and high skills training necessary for them and the nation to compete in a world marketplace.

Education and the Local Economy

The effects of this choice may already be manifesting itself in California and more specifically, Los Angeles. California and Los Angeles County are microcosms of what is occurring at the national level and serve as laboratories for forthcoming trends throughout the country. In the last decade, California has rapidly developed a third world nation and economy that operates within a larger high-tech first world environment. According to Garreau (Edge Cities, 1991), if you were to draw a circle with a sixty-mile radius around Los Angeles, and declare the domain an independent nation, it would be the eleventh richest realm on earth. That Sixty-Mile Circle would be the third richest country in the western hemisphere, after Canada. It would be the third richest in the Pacific Rim, after China and would be richer than most of the twelve members of the European Economic Community. The United States is absorbing more legal immigrants than the rest of the world combined and Los Angeles is its premiere entry location. The demographic changes that are beginning to transform the rest of the country, presently exist in Los Angeles (Newsweek, May 18, 1992). Garreau points out that this Sixty-Mile Circle is the second largest urban economy in the Western Hemisphere. It is the second largest Mexican city in the world, the second largest Guatemalan city, the second largest Salvadoran city, the second largest Cambodian city, the second largest Laotian city. It has the largest concentration of Koreans in North America, the most Filipinos, the most Vietnamese, the most Iranians, the most Thais. Newsweek (May 18, 1992) notes that nearly 100 languages

are spoken in local schools. More than 300,000 newcomers enter the area each year and nearly 200,000 students entered the state's schools during the 1992-1993 school year.

While a slow recovery from the recent recession continues nationally, California and Los Angeles are still firmly mired in recession and unemployment. The UCLA Business Forecasting Project (1992), notes that the State of California has experienced the worse economic conditions since the Depression. Unemployment in the state has been higher than any other state in the nation. Since the beginning of the recession, over 800,000 jobs have been eliminated throughout the state at a time when California needs to create 300,000 jobs a year just to keep pace with population growth (California Employment Development Department, 1992). Against this backdrop, the recent civil disturbance in Los Angeles convulsed the region and further damaged its economy (Los Angeles Times, November 1992). According to the UCLA analysis, the Los Angeles riots cost the area 41,000 jobs. In February 1993, the unemployment rate in urban Los Angeles stood at 15.7%. The Los Angeles Times (November 17, 1992) notes though, that this is an artificially low rate considering the number of individuals who have either stopped looking for a job or take on part-time employment. Although this part-time employment keeps individuals off unemployment according to the Times, it barely provides enough for these wage earners (many of them single parents) to adequately support families.

Education and training programs which assure that individuals possess the skills that improve productivity and ensure a more prosperous future are an essential ingredient for the success of the post-riot urban renewal effort (Rebuild LA, 1992). According to the Los Angeles Business Roundtable (1992), a major segment of growth in the Los Angeles job market is occurring at the top of the skills ladder. The change from an initially simple technology base to

the highly sophisticated technology of today require upgraded employee skills (Gordon, 1989).

David Osborne and Ted Gaebler contend in Reinventing Government (1992), that too often bureaucratic governments, which include education, focus on inputs and not outcomes, and pay scant attention to results. Among the dangers in this as Osborne and Gaebler point out, is that the majority of legislators and public executives have no idea which programs they fund are successful and which are failing. When they cut budgets, they don't know whether they are cutting muscle or fat. Lacking objective information on outcomes, they make their decisions largely on political considerations (Gaebler and Osborne, 1992). Likewise according to Gaebler and Osborne, when political leaders decide to increase their efforts in any area, they often have no idea where to put the new money. Marshall and Tucker note in Thinking for a Living (1992), that because job-related training is the key to improvement of qualifications and to the certification of skills, accurate information about the training is important. According to Marshall and Tucker though, this information is unknown. Yet, considering that the new Administration intends to focus efforts on the more than 50% of students who do not pursue traditional university education (Los Angeles Times, December 29, 1992), knowing what works and how in effectively training students to compete in the world marketplace is critical. Knowledge of what constitutes efficient and effective training programs will be essential to future funding and planning.

According to Van Adams (1991), in both developed and undeveloped countries, education and training are central to developing, managing, and using technologies for the production of goods and services. However, training can yield good returns only when there are jobs for graduates and training is closely linked to effective employment demand. In the United States,

more than 70% of these jobs will not require a four-year college education by the year 2000 (America's Choice, 1991). America's Choice recommends a comprehensive system of Technical and Professional Certificates and associate's degrees be created for the majority of students and adult workers who do not purse a baccalaureate degree.

Need for Partnerships

Over the last ten years, business involvement in schools has steadily increased (Imel, 1991). Stone (1991), in the Harvard Business Review asks whether business has any business in education, and not all educators agree the business should have a role in education. Stone notes, however, that this question was more hotly debated by educators and executives in the early 80's than now. Previous involvements of business in education have been based on two often unexamined assumptions according to Stone. The first is that schools are the problem and business is the solution. The second is that school is school and work is work. According to Stone, changes in the global economy and in U.S. society have made both these assumptions obsolete. Stone asserts that with few exceptions, neither business nor education are successfully preparing people for the demands of the new industrial economy. However, in this new economy, school and work are necessarily intertwined. By perpetuating an old "hands off" relationship and failing to create new formal ties, U.S. schools and companies undermine many of their own best efforts to give every student the academic skills and motivation necessary to be a productive member of society (Stone, 1991). Today more than ever, as Stone asserts, school is about working and work is about learning.

History of Business/Education Partnerships

Business involvement with education began with modest, local initiatives like adopt-a-school

programs and teacher-recognition awards, but in recent years, other types of partnerships have been evolving. Results of a Fortune 500 and Service 500 survey found that of the 305 companies responding to the survey, all but seven reported they were doing something for education (Kuhn, 1990). Corporate programs range from leadership training for school superintendents and principals to schools within schools for teenage mothers According to Stone, the level of business engagement and activity in education is unprecedented in this century.

These new initiatives are being propelled by a need to address some serious social and educational problems. Social burdens placed on schools, inflexible bureaucracies and academic failures such as high school dropout rates that average 25% and climb to 40% and 50% are among the issues that have compelled businesses to involve themselves with education. However, while more businesses are helping public education, many of the activities they are involved in do not contribute directly to strengthening the linkages between education and work (Imel, 1991). Imel notes that in some communities business leaders are entering into a new form of collaboration, known as work-education partnerships, that focus on educational reform and on strengthening the links between education and the workplace for economically disadvantaged youth. Locally, the effect of this work-education partnership on the link between education and the workplace was examined via a survey of businesses in east Los Angeles County. Respondents included businesses who had no prior experience with vocational education and businesses whose experience with vocational education included providing onsite vocational training of students. Tables 1,2,3, and 4 display the results of this survey.

Table 1
Business Responses to
Concerns Related to Vocational Education

Inquiry	Current or Prior Experience Working with Vocational Education Programs	No Current or Prior Experience Working with Vocational Education Programs
Would support field trips to facility	32.9%	13.9%
Would be supportive of workshops for teachers and business	19.5%	10.6%
Would support unpaid student internships	56.4%	27.5%
Would support guest speakers and demonstrations to classes	22.8%	14.2%
Would support student leadership award programs	10.1%	5.1%
Support consultants developing training courses	16.8%	9.8%
Support donating equipment and/or materials	13.4%	7.0%
Would be supportive of scholarships/fellowships	2.0%	2.1%
Would support student incentive program	6.0%	3.6%
Would serve as volunteer tutor in subject areas	5.4%	4.3%
Would serve as school club sponsor	5.4%	3.5%
Would support teacher recognition	5.4%	4.7%

Table 2
Business Responses to
Importance of Vocational Training Issues

Inquiry	Current or Prior Experience Working with Vocational Programs	No Current or Prior Experience Working with Vocational Programs
Access to Trained Employees	71.2%	49%
Training & upgrading skills of employees	49.6%	40%
Improving relations through services to education	60.4%	44.6%
Helping to make training courses more relevant	64.5%	45.3%
Improving vocational student basic skills achievement	60.4%	45.4%
Getting tax breaks or other financial incentives	48.3%	46.2%
Promoting career awareness among youth	62.4%	50.2%
Providing resources as tax write off	34.9%	34.9%
Providing employees to volunteer	43.3%	31.6%
Shaping policies and mgmt of voc. ed.	51.7%	31.5%
Helping teachers with current business practices	63.8%	45.7%

Table 3

Grade for Employees Trained in Vocational Education

Grade	Current or Prior Experience Working with Vocational Programs	No Current or Prior Experience Working with Vocational Programs
A	21.5%	13.3%
B	25.5%	16.0%
C	14.1%	9.6%
D	2.0%	2.5%
F	2.0%	1.5%

Table 4
Grade for Employees with High School Diploma

Grade	Current or Prior Experience with Vocational Programs	No Current or Prior Experience with Vocational Programs
A	18.5%	14.1%
B	28.4%	24.2%
C	14.8%	22.1%
D	6.2%	4.0%
F	1.2%	1.3%

As these tables indicate, those respondents who have had previous experience working with vocational programs, indicate a greater willingness to participate in various educational ventures and rank the importance of various vocational issues higher as well as grade the results of vocational education higher than businesses who have not had any prior experience in

vocational education. This might be seen as an affirmation of Imel's assertion that partnerships between businesses and education do tend to strengthen the link between business and education.

This link is important, especially considering that while the litany of social problems that merit attention is long, the most urgent among them are those that affect the employment potential of youth (Brown, Martin, & Mocker, 1988). Reisner and Balasurbramaniam (1989), recommend improved business linkages for disadvantaged youth. Their study of circumstances under'ying the school-to-work transition problems of disadvantaged youth found that programs are successful when they provide early intervention; the availability of tutors, mentors, and advocates; supervised work experience; and placement experience. The Los Angeles Times (September 13, 1992), notes that any effective jobs training program must also account for the necessary support services individuals from disadvantaged backgrounds bring with them to the classroom. Failure to do so according to the Times, can and often does result in failure on the part of the student who is unable to have special needs taken care of despite the quality of the vocational training.

Education Resources Group,Inc., was commissioned by the United States Department of Education to review current research on the effectiveness of educational partnerships. The overall intent of this review was to establish an effective evaluation methodology for educational partnerships. In their review, they noted that business partnerships enabled schools to better serve at-risk youth by providing increased access to employment/work experience and increased personal attention (Education Resources Group, Inc, 1991).

Clearly, every resource within the community must be utilized if there is to be any chance of meeting the diverse needs of this rapidly changing urban environment. Neither education nor

business, nor the vast array of social service agencies can do it alone. Only by combining strengths, contacts, and resources will there be any chance of succeeding in training and placing the kind of workforce that will be necessary to keep this country economically healthy and internationally competitive. Partnerships which utilize the combined efforts of education, business and community service agencies are a viable way of providing the most complete array of services to both education and the community. They are cost effective in that the work to avoid duplication of effort and, if all partners participate in an open and equal manner, the likelihood of all partners gaining from the relationship is high.

Model Project

The Los Angeles Area Business/Education Partnership Project which has been operated by Los Angeles Trade Technical College, California State University Los Angeles, the East San Gabriel Valley Regional Occupational Program, over 300 business, and over 20 public and non-profit community service agencies for the last four years has been providing coordinated academic and vocational instruction that prepares students for success in the community, home, workplace, and college. It has been facing, head-on, many of the challenges described above, and has yielded some positive results.

Through its use of a wide number of other resources the partnership has been successful in sig ficantly reducing high school drop-out rates in minority and disadvantaged communities. The current partnership project serves predominantly minority, LEP and other high risk.

The program has as its goals:

1. To provide an opportunity for students to develop the attitudes, skills and knowledge necessary to enter and succeed in industry by training and placement directly in the workplace.
2. To provide the necessary skills to students who wish to pursue

higher education.

3. To provide a comprehensive curriculum reviewed regularly by business and industry, meeting both the career and academic needs of all students, as well as each student's individual goals.
4. To provide a curriculum which constantly correlates the practical application of basic literacy skills with the working world.
5. To produce students with marketable job skills and a clear understanding of the work ethic.
6. To produce competent, aggressive leaders ready for management positions.

This Partnership model program achieves these goals by utilizing several key components. They are:

1. Early identification and accessible ongoing monitoring and support services which monitor student progress, identify potential problems, and provide services to assist students overcome barriers to school completion. Business volunteers, college and high school students acting as tutors, mentors, job coaches and peer advisors serve as role models that provide confidence and assurance to participants. Other vital support services include child care and transportation for teen mothers to vocational training from home.
2. Parental involvement which includes the parent in the assessment, goal setting, monitoring, support and follow-up process.
3. Adaptive curriculum that emphasizes meaningful skills development including teaching students how to learn, how to utilize their critical thinking skills, and how to socialize in culturally acceptable modes.
4. A combination of instructional approaches including cooperative learning groups, mastery learning, adaptive education, peer tutoring/coaching, and curriculum-based assessment occurring within a self-paced format.

5. Cooperative training programs with business and industry that enable students to receive a substantial portion of their job training at the worksite. Business-based job training allows the student to see, early on, the application of learned academic skills on the job.

6. Academic and vocational instruction operated in a decentralized, multi-site format which neutralize some gang "turf" problems, help to reduce fears of going to a large, impersonal school site, and help students learn in "real work" settings.

7. Enrollment on an open-entry basis which provides the best structure for a variety of initial academic skill levels, various entry dates, and different learning rates of identified youth.

8. Cooperative liaisons with local businesses, colleges, universities, and high schools in partnerships that link students with both the business community and post-secondary institutions. This allows concurrent accessibility to both jobs and to post-secondary education for students who previously had not realized their potential, and for those who would not have otherwise considered additional technical training or college.

9. Academic and vocational instruction taught concurrently and tied into the student's personal career goals and job training.

10. Cooperative liaison with local community service agencies which provide a wide variety of support services necessary to meet the diverse needs students and their families possess.

Training Process

Student Enrollment - The project itself operates on an open-entry, open-exit basis. Individual student goals are set and may include: (1) intense remediation in basic subject areas; (2) pre-vocational and vocational training; (3) assignment to a mentor and/or tutor; (4) counseling and guidance including home-based guidance; (5) assignment to a cluster group (school-within-a-school) and cooperative learning groups; (6) worksite learning; and (7) summer employment opportunities.

Assessment - Prior to and during enrollment, students are assessed including an indepth academic and vocational assessment. The results of the student's assessment are be included in the Personal Academic and Career Plan (PACP) provided for each student.

Individualized Training Plan - An Individualized Plan is developed for each student. Included in this plan are the specific academic skills, and job related competencies each student needs to achieve for proficiency in his or her training plan. Specific support and follow-up services needed to provide for transition into employment are identified and provided.

Referral and Placement into Appropriate Learning Program(s) Using Partners - Program placement is based on assessment results and student goals. Business volunteers and college students, provide individualized, competency-based tutorial instruction. Tutors also work with small groups in cooperative learning teams. Occupational skills training occurs both in the classroom and at business partners worksites. Worksite and classroom instruction is coordinated and sequenced in a manner which assures each compliments the other. Business and industry partners participate in subject matter advisory meetings to assure this instruction is coordinated and relevant to current market standards. Various instructional strategies are implemented to

enhance career awareness, employability skills and/or basic academic skills, and include individualized instruction, direct group instruction, and cooperative learning groups.

Support Services - Specific support services are provided to students by a wide variety of community and business partners and are initially identified at the time the student enrolls. The at-risk students this program serves have a range of special needs that often go unfulfilled. As a result, students such as these often move through the system, fall further behind and dropout. The schools and colleges involved in this pilot project have formed partnerships with community based organizations, social service agencies, State of California service providers and businesses to help meet these special needs. Community linkages which provide necessary social support assistance for students and their families include Los Angeles County Mental Health, Los Angeles County Department of Health Services, the California Employment Development Department, the California State Department of Rehabilitation, city parks and recreation and community service organizations make up a part of this social services network. Child care is provided as needed and transportation which picks up teen parents at home with their children and delivers them to child care and classes is provided. Parenting skills are taught to all teen parents.

Articulation Agreements - 2+2 articulation agreements are a vital aspect of the model project. These articulation agreements allow the high school student to apply course work completed at the secondary level to program requirements at the community college. In the case of a 2+2+2 tech-prep articulation agreement, community college course work can be applied at the university level. Currently nearly two dozen such agreements exist.

Business Partnerships - There are currently over 300 partnership agreements between business

and the Program. Project instructors develop new partnerships on an on-going bases. Business and industry provide worksite instruction, mentoring, job shadowing, and job placement opportunities for students. In addition, they provide up-to-date labor market information and assist in the development and modification of curriculum. The business component of the partnership includes on-the-job training and placement for students. Job placement is a key aspect of this model program for students nearing program completion. Viable employment options which provide for movement up the career ladder are an integral aspect of the project.

In addition to its affiliations with business and industry already mentioned, the project has as its partners a wide variety of state, Federal, and local resources which allow it to offer a large number of supportive services to participants at all stages of their training. These resources include: National Council on Aging which provides tutors and mentors for high risk students, JTPA, which provides job development and job placement for qualifying students, Dept. of Rehabilitation which provides needed support services for students with disabilities, a formal agreement with Employment Development Department which allows access to daily up-to-date job placement information and services, local Chamber of Commerce which provides job shadowing and role modeling by having business and industry leaders volunteer to be guest speakers and mentors. By utilizing a wide variety of community and other resources, the model is a cost-effective one that can be replicated in other communities.

PROGRAM EVALUATION-The **evaluation component** is a strong part of the total design of the project. The University of California, Riverside conducts a yearly outside evaluation of all project objectives and conducts a multi-year student follow-up.

RESULTS

The project has been documenting both employment placement effectiveness and continuation in school. The four-year student follow-up on the model program has revealed significant numbers of students obtaining training-related employment and movement into the community college. Student follow-up from these projects reveals over 90% full-time job placement average over the project years as opposed to 40% of the control group. Twenty-percent of these participants have moved into management jobs as compared to under 10% of the control group. In the four years of the model program the high school drop out rate never was higher that 3% among the students participating in the project. These were students who came from high schools with drop out rates which ranged from 30% to 40%.

REFERENCES

Becklund, L. (1991, September 22). Rage and Alienation Mark Suspects in Mall Murders. The Los Angeles Times. Pg. 1, 24, 25, Pt. 1.

Brooks, N. (December 16, 1992). Sluggish Economy May Linger in State: UCLA Raises Specter that State's Headache Could Persist. The Los Angeles Times. Pg. 1. Pt. D.

Brooks, N. & Sanchez, J. (1992, December 23). U.S. Firms Map Ways to Profit from the Accord. The Los Angeles Times. Pg. 1, Pt. 4.

Brown, N., Martin, D. & Mocker, D. (1988). Lessons Learned from Collaboration. Urban Education. v. 23, no. 1, pgs. 42-50.

Education Resources Group, Inc. (1991). An Overview of Evaluation Research on Selected Educational Partnerships. United States Department of Education, Washington, D.C.

Flanigan, J. (1992, November 14). Can L.A. Answer Cry for Economic Equality. The Los Angeles Times. Pg. 1. Pt. 1.

Flanigan, J. & Lee, P. (1992, October 15). Major Impact Expected on Markets, Jobs, Wages. The Los Angeles Times. Pg. 1, Pt. 1.

Garreau;, J. (1991) Edge City - Life on the New Frontier. New York: Doubleday.

Justin, M. & Kameen, M. (1986). School-Business Partnerships: Working to Defuse the Dropout Time Bomb. NASSP Bulletin. December 1986, pgs. 107-108.

Kotkin, J. & Friedman, D. (1992, May 15). Out of the Ashes: Start Small to Rekindle the Future. The Los Angeles Times. Pg. 2, Section T.

Marshall, R. & Tucker, M. (1992). Thinking for a Living. New York: Basic Books.

McMillan, P. (September, 1992). Spring Riots Continue to Haunt L.A.'s Economy. The Los Angeles Times. Pg. 1, Pt. 4.

Meyer, M. (1992). Los Angeles Will Save Itself. Newsweek. p. 46.

Nagel, T. (1992, November). Projections for the California Economy. Paper presented at the meeting of the California Merchandising & Marketing Association, Ontario, CA.

Nasar, Sylvia (1992, December 27). Clinton Job Plan in Manufacturing Meets Skepticism. The New York Times. Pg. 1, Pt. 1.

National Center on Education and the Economy (1990). America's Choice: High Skills or Low Wages. Rochester, New York.

National Commission for Employment Policy, (1985).

Osborne, D. & Gaebler, T. (1992). Reinventing Government. Massachusetts: Addison-Wesley.

Reich, Robert B. (1992). The Work of Nations. New York: Vintage Books.

Stone, N. (1991). Does Business Have Any Business in Education? Harvard Business Review, Mar/Apr, p. 46.

Thurow, Lester (1992). Head to Head The Coming Economic Battle Among Japan, Europe, and America. New York: William Morrow and Co.

Van Adams, A. (1991, November 12 Preparing for a World Market Economy. Paper presented at the American Vocational Association Conference, Los Angeles, CA.

Vartabedian, R. (November 15, 1992). L.A. Defense Job Losses Twice the U.S. Rate. The Los Angeles Times. Pg. 1. Pt. 4.

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